



Department of Commerce

Safety & Buildings Division

201 West Washington Avenue

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Evaluation # 200325-O

Wisconsin Building Products Evaluation

Material

Watchdog Waterproofing

Manufacturer

Tremco Barriers Solutions, Inc.
6402 East Main Street
Reynoldsburg, OH 43068

SCOPE OF EVALUATION

GENERAL: This report evaluates the use of Watchdog fluid-applied waterproofing membrane, manufactured by Tremco Barriers Solutions, Inc.

This review includes the cited **Comm** code requirements below in accordance with the current **Wisconsin Uniform Dwelling Code (UDC)**, (for 1 & 2 family dwellings):

- **Dampproofing:** Watchdog fluid-applied waterproofing membrane was evaluated in accordance with dampproofing requirements of s. **Comm 21.18(3)(a)4**.

This review includes the cited **International Building Code (IBC)** requirements below in accordance with the current **Wisconsin Amended IBC Code**:

- **Dampproofing:** Watchdog fluid-applied waterproofing membrane was evaluated in accordance with dampproofing requirements of s. **IBC 1806.1** and **1806.2**.
- **Waterproofing:** Watchdog fluid-applied waterproofing membrane was evaluated in accordance with waterproofing requirements of s. **IBC 1806.3**, and s. **1806.3.2**.

DESCRIPTION AND USE

Watchdog Waterproofing is a fluid-applied, one-coat, polymer modified asphalt waterproofing membrane. The waterproofing is intended for spray application to below-grade foundation walls and footings of concrete and unparged or parged concrete masonry unit construction.

TESTS AND RESULTS

Tensile strength, elongation and Shore A Hardness testing on Watchdog fluid-applied waterproofing membrane was preformed by DL Laboratories (Report No. DL-11692B), with average test results for tensile strength and elongation of:

Dry Film Thickness (mils)	Tensile Strength (psi)	Elongation (%)
40	50	2965
50	40	3015

The Shore A Hardness of the coat was determined to be 40.

Hydrostatic Pressure Resistance Test as outlined in Section 4.4 of the AC 29, “Acceptance Criteria for Cold, Liquid-Applied, Below Grade, Exterior Dampproofing and Waterproofing Materials”, when applied to both parged and unparged masonry blocks. Testing preformed by DL Laboratories (Report No. DL-13456).

The condition of the test substrate after 48 hours in the hydrostatic chamber was as follows:

1. **Coated Masonry Specimens** (10 psi for 48 hours)
 - Specimen No. 1 – No water penetration
 - Specimen No. 2 – No water penetration
 - Specimen No. 3 – No water penetration
2. **Coated Parged Masonry** (10 psi for 48 hours)
 - Specimen No. 1 – No water penetration
 - Specimen No. 2 – No water penetration
 - Specimen No. 3 – No water penetration

Conclusion: Watchdog fluid-applied waterproofing membrane inhibits water penetration through the parged and unparged masonry substrates, when subjected to 10 psi for 48 hours.

Tensile Strength and Elongation, Durability, Flow Resistance as a Function of Pressure, Water Absorption and Hardness test procedures were done by DL Laboratories (Report No. DL-11491A-R1). The tests included:

- Watchdog fluid-applied waterproofing membrane’s ability to remain in place, per **ASTM C836**, Par. 5.9;
- tensile and elongation per **ASTM D412**, Method A; durability per **ASTM D3273** for 672 hours and **ASTM D3274** for Degree of Surface Disfigurement by Microbial Growth;
- Flow Resistance as a Function of Pressure per **ASTM E96**, Procedure B – Wet Cup Method; Water Absorption as outlined in the Proposed Acceptance Criteria for Cold Liquid-Applied, Below Grade, Exterior Dampproofing and Waterproofing Materials, AC 29, Par. 4.3;
- Adhesion-in-Peel per **ASTM C836**, Par. 5.10;
- Ability of Material to Resist Hydrostatic Pressure per **ASTM C836**, Par. 5.12;
- Low Temperature Flexibility and Crack Bridging determined by the procedures outlined in **ASTM C836**, Par. 5.7; and
- Hardness and weight loss as determined by the procedures outlined in **ASTM C836**, Par. 5.6.

LIMITATIONS OF APPROVAL

General: This evaluation is limited to Watchdog fluid-applied waterproofing membrane. The evaluation shall be used by designers, contractors and code officials (building plan reviewers and inspectors), to determine that the evaluation subject complies with the code requirements specifically addressed, provided that this product is installed in accordance with the below conditions, pertaining to masonry walls.

1. Watchdog fluid-applied waterproofing membrane is limited to application on the exterior **vertical** surfaces of below-grade footings and foundation walls of parged or unparged concrete masonry, concrete construction and vertical surfaces of footings.

2. Surfaces of the footings and foundation walls to be waterproofed/dampproofed shall be clean, dry and free of mortar, sand, soil, water, frost or other loose debris. The surfaces shall be smooth and free of projections including form ties. Concrete, parged or unparged masonry surfaces shall be cured and dry prior to application of Watchdog fluid-applied waterproofing membrane.
3. All voids, tie holes and honeycombed areas in footings and foundation wall shall be filled with non-shrink grout (allow adequate time to cure before membrane application), or an asphalt based mastic.
4. Watchdog fluid-applied waterproofing membrane shall be spray applied. Ambient air temperature at application shall be 20 degrees F (-6 degrees C) or greater. Application temperature of Watchdog fluid-applied waterproofing membrane shall be in accordance with the manufacturer's published installation instructions.
5. Backfilling shall not begin sooner than 24 hours after membrane application.
6. The approval is limited to an evaluation of Watchdog fluid-applied waterproofing membrane applied at a minimum wet thickness of 0.060-inch (1.52 mm) (60 mils), which cures to a minimum dry film thickness of 0.040-inch (1.02 mm) (40 mils).
7. Application of Watchdog fluid-applied waterproofing membrane on uncured concrete is outside the scope of this evaluation.

NOTE: The cited code sections below are related to the use of Watchdog fluid-applied waterproofing membrane but, not within the scope of the evaluation. However, the code sections are related to the determination of code compliance.

The **Comm** code limitations are in accordance with the current **Wisconsin Uniform Dwelling Code (UDC)**, (for 1 & 2 family dwellings):

- **Dampproofing/Waterproofing of Footings and Foundation Walls:** Before the Watchdog fluid-applied waterproofing membrane is installed, footings and foundation walls shall be designed in accordance with s. **Comm 21.15** and **21.18(1) –(3)**.
- **Erosion Control Procedures:** shall be in accordance with s. **Comm 21.125**.

The **IBC** limitations below are in accordance with the current **Wisconsin Amended IBC 2000 Code**:

- **Dampproofing/Waterproofing of Footings and Foundation Walls:** Footings and foundation walls or portions thereof that retain earth and enclosed interior spaces below grade shall be dampproofed/waterproofed in accordance with s. **IBC 1806**.

This approval will be valid through December 31, 2008, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The product approval is applicable to projects approved under the current edition of the applicable codes. This approval may be void for project approvals made under future applicable editions. The Wisconsin Building Product Evaluation number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Revision Date:

Approval Date: October 30, 2003 By: _____

Lee E. Finley, Jr.

Product & Material Review

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